THE

MEDICAL AND SURGICAL REPORTER.

No. 444.] PHILADELPHIA, SEPTEMBER 2, 1865. [Vol. XIII.—No. 10.

Original Department.

Communications.

TENACITY OF HUMAN LIFE AS SEEN IN CASES OF GUNSHOT INJURIES.

By T. L. Leavitt, M.D., A.A.S., U.S.A.

(Continued from vol. xii., p. 106.)

Case 4. Harrison H., private, Co. E, 53d N. C., æt. 29 years, was wounded in the head during the last raid upon Washington, July 12, 1864, and was admitted to Lincoln Hospital, July 14th, a minnie ball having entered half an inch above the fronto-parietal suture, and two inches to the right of the median line, penetrating the brain, and apparently lodging there.

July 14th. The brain substance oozes out in a disorganized mass, patient is totally unconscious, groans as if in pain, tosses himself about in paroxysms of suffering, requiring force to retain him in position in bed. Unable to take food or medicine, marked strabismus, eyes open and staring, no dilatation or contraction of pupil perceptible.

July 15th. Convulsions frequent and violent, cold applications to wound, and ordered for him R. hydrarg. chlor. mit., gr. ½, opii pulv., gr. ½ every three hours; also opii pulv., gr. ½, every two hours, feeling impressed with the necessity of quieting this tremendous nervous excitement, and soothing and allaying the pain.

After a number of trials, succeeded in getting him to swallow the prescribed dose, which was continued at the regular intervals.

July 19th. Involuntary evacuations of urine; toward evening, at times, has lucid intervals; suffers still intense pain; takes light food; talks wildly and incoherently; automatic movements of left side of body, right side paralyzed.

21st. Better this morning, answers questions slowly, though rationally.

22d. The convulsions have ceased, the last one occurring yesterday morning. I have no hesitancy in saying that the opium was the agent in effecting this great change. The right side of the brain from having been in a state of disorganization and irritation, induced by the extensive injury and destruction of its parts, is now quieted and controlled. The pain is mitigated, the spasms cease, consciousness returns, no longer relaxations of the sphincters and involuntary discharges take place; indeed, the symptoms are becoming so favorable that one begins to hope against hope, and to think of and quote the case of the Vermont quarryman, who recovered after a tamping iron had passed through the skull, and to wonder if here may not be another similar case.

23d. Still improving, slept well last night, has a good appetite, talks and jokes with his fellow-prisoners, complains of some pain, at times, in the back of his head.

24th. Noticed some distension of scalp in posterior portion of head, behind the mastoid process of temporal bone, and the seat of severe pain; incised freely, giving exit to a large amount of pus; two fragments of bone, protruding, were removed; attached to one part of the bone was found a small portion of the dura mater and the inner table deeply indented from contact with the ball, which was found, upon further examination, roughened and irregular, having perforated the brain.

Evening. Pain much relieved.

25th. Doing well, pulse good and regular, Continued treatment, though at much longer intervals.

26th. Perfectly sensible, complains of but slight pain—wound discharges less than yesterday, when some spiculæ of bone were removed. Brain-substance in small quantities continues to exude.

27th. Weather intensely hot. About 2 P. M., a severe hemorrhage occurred from a meningeal branch, but succeeded in controlling it by pressure.

6 P. M. Hemorrhage again took place from both openings, but was arrested. Consciousness perfectly retained, complains of weakness.

28th. Convulsions commenced again this morning, at 6.30 A. M., and continued with increasing frequency and intensity. At 10 A. M., comatose, pulse less at wrist, stertorous respiration. Continued in this condition until 4 o'clock P. M., when death ended his sufferings, having, in his

fierce struggle with the grim monster, kept him at bay fourteen days, notwithstanding a bullet had torn its jagged way through the right lobe of the cerebrum, and remained lodged against the meninges for ten days.

The autopsy revealed a fracture extending six inches in length and from one to two inches wide chiseled, as it were, out of the solid skull structure, the right cerebrum a mass of decomposition, and the middle meningeal artery sloughed through. The specimen was prepared and forwarded to the Army Museum, at Washington, D. C., a silent though forcible witness of the great tenacity of human life.

Case 5. Theodore M., Courier of Gen. Beauregard, Co. C, 3d. N. C. Cav., æt. 18, received a gunshot wound in the battle of Coal Harbor, Va., May 31st, 1864, the ball entering one half inch below and to the left of the apex of the heart, between the fifth and sixth ribs, passed directly through the left lung, and made its exit posteriorly about one line to the right of inferior angle of left scapula, shattering the seventh rib in its course. Admitted to hospital June 5th, 1864. Patient suffers greatly from inability to breathe when in a reclining position, has considerable cough and frothy expectoration of bloody mucus, and at times slight hemorrhages which are controlled by the free use of table salt. Unable to sleep, except when in a sitting posture. Exceedingly feeble and anæmic, says he bled a great deal on the field. Pulse quick and thready, 120 beats in the minute. Much prostrated by the intense heat. On examining the chest, find in apex of left lung feebleness of respiration, loud mucous râles, and from the fourth rib downward, total absence of all respiratory sounds, increased vocal fremitus, great dulness on percussion, and in the right lung increased resonance and exaggerated respiration.

June 29. Chest sounds much improved, fewer râles, less dulness and dyspnœa, and altogether better.

July 8. Wound healing rapidly, removed spiculæ of dead bone from posterior wound. Able to walk round the ward.

16th. Complains of soreness in lung. Cough much better.

Aug. 2. Removed more spiculæ from posterior wound, anteriorly discharges profusely.

8th. Both wounds nearly healed, respiration reestablished in the left lung except in the immediate locality of the injury. Looks delicate, but gaining daily under iron and quinine.

27th. Both wounds healed. The patient now assists in the ward as dresser.

CARDIAC PARALYSIS.

(With report of a Case.)

By Eli D. Sargent, M.D., U.S.N.

Death by syconpe is at once so alarming, and so insidious in its approach, that although it may in many instances not be amenable to treatment, even if its prognosis be made out, still its etiology and pathology are subjects of sufficient interest to claim the attention of the profession.

The heart's action may suddenly cease from various causes; as, for example, the obstruction offered by effusions of lymph into the pericardium, or rupture of its walls, or of large vessels in its vicinity allowing the blood to escape from its natural channel. I am, however, led to believe that a majority of the cases which have fallen under my observation, have been caused by enervation, or paralysis of the heart itself from disease either in the recurrent laryngeal and pneumo-gastric nerve, or else from some affection of the sympathetic, which may or may not extend beyond the cardiac and coronary plexuses. This fatal paralysis has occurred in my practice only as a sequel to exhausting disorders, and it is said to be particularly common after diphtheria, where there is often a tendency to local paralysis. It also follows chronic diarrhœa, rubeola, and doubtless many other diseases, and it is not improbable that many cases of sudden death occurring to the anæmic in the lower walks of life, explained as arising from "heart disease," may properly come under this head. My investigations after death have seldom afforded satisfactory evidence of the true cause of death in these cases, and I have been compelled to rely largely upon the rational signs for diagnosis.

The following case will serve as an example of this not very uncommon mode of dying, and the result of an attempt to discover the fatal lesion:

Serg't Eli T. Cook, Co. E, 125 Ills. Vols.. came under my care in Cumberland U. S. A. General Hospital, at Nashville, Tenn., June 4th, 1864, while convalescent from chronic diarrhœa. Age about 35. Married, and a native of America.

Patient was able to walk about during the day, and said he felt well, although he did not appear strong—movements were a little undecided. Gave no medicine, and only directed full diet. June 5th and 6th, condition the same. Continued treatment.

On the morning of the 7th he asked to be sent to his regiment, for duty, insisting that he was entirely well. Early in the afternoon of this day, however, I was called to his bedside in haste, and was surprised to find life extinct.

His attendant stated that he had been around, as usual, during the morning, had eaten freely at noon, and lying down soon after dinner, while conversing cheerfully, had instantly expired.

Having obtained advice, and decided that the subject was not suffering from catalepsy, a post-mortem examination of the body took place, four hours after death—temperature of the room about 80 degrees, rigor mortis not perceptible; cadavera not emaciated—slight discoloration of the anterior part of both legs just below the knees, resembling the spots of scorbutus. Upon opening the thoracic cavity, found the right pulmonary and costal pleura covered with a loose effusion of lymph, most abundant upon the costal pleura. A quantity of pale straw-colored fluid filled the right pleural cavity, compressing the right lung so as to give it the appearance of a solid organ—portions of this lung sank in water. Left lung only slightly congested posteriorly. The pericardium contained an ounce of fluid. Heart flabby, and its walls thin—valves normal—a firm fibrinous clot in the left auricle, closely adherent; weight of heart eleven ounces and a half. Liver of a deep-fawn color externally, still deeper internally—weight five pounds and six ounces. Spleen of its usual density and weighing eighteen ounces. No ulcers in either large or small intestines. Mesenteric glands pale, soft, and small. Upon opening the cranial cavity, found one ounce of aqueous fluid, half a drachm in each lateral ventricle. Brain substance normal. No traces of congestion were discovered. Diagnosis—paralysis of the heart.

This case is hardly less remarkable in showing no satisfactory explanation of the sudden death, than in revealing at the post-mortem examination disease which was not before suspected. It is worthy of remark, however, that the profuse and exhausting secretion of both pus and serum which was so conspicuous in this case, is a common complication or attendant upon this class of cases.

U. S. Bark "J. C. Kuhn,"
Pensacola Bay, Fla., Aug. 7, 1865.

Dysentery caused by Impure Exhalations.

A severe outbreak of dysentery has recently occurred in a county asylum in England, caused by the effluvia from a field irrigated by sewage. The poison had a period of incubation in most cases before the dysentery appeared, of from three to five days. The morbid appearances most characteristic of this epidemic were—1st, a soft membranous deposit on the mucous membrane of the intestines; and 2d, the diseased condition of the lower part of the small, as well as the large intestine, in all the cases.

Editorial Department.

Periscope.

INTERMITTENT OPHTHALMIA.

At the annual meeting of the American Ophthalmological Society, (June 13, 1865,) Dr. H. Derby, of Boston, read a very interesting history of a case under his observation.

Mrs. S. H., æt. 59, of full habit and excellent health, consulted Dr. D. in March, 1864, with a smarting and sensation of foreign matter in her right eye. Upon examination it was found that a belt or elevated vascular band of tissue, involving the conjunctiva and sub-conjunctival tissue, extended back from the inner edge of the cornea below the caruncle, becoming wider across toward the cornea, which was not in the slightest degree affected. It fact it resembled a pterygium, of which the corneal portion had been carefully dissected away.

Attention was at first attracted to it seven years before, by a pricking and smarting of the eye, and a sensation as of a foreign matter between the lids.

The patient goes to bed perfectly well, having had no premonitory symptoms, and either notices a sensation of fullness in the eye if she wakes up in the night, or observes the red patch on going to her mirror in the morning. No treatment affects its duration or recurrence, insufflation of calomel, atropine, etc., having been tried in vain. On inspection, the same reddish band would be visible—faint at first, rapidly increasing in prominence and deepening in color, and passing off in three or four days. The attacks occurred every four or five days, so that one would barely be recovered from before another would occur. Six weeks later they began to diminish in frequency, occurring every eighth day, now and then waiting till the ninth. During the first year the interval never exceeded ten days, and during the second, eleven.

The interval between the attacks gradually increased, averaging from thirty to thirty-three days, and on one occasion reaching the thirty-eighth. The duration of the attack came to average about three days, and it was observed that the color of the band was less red, and the uncomfortable sensation in the eye less marked.

The following are the dates of recurrence while the patient was under Dr. Derby's observation: In 1864—March 17th, April 19th, May 19th, June 26th, July 29th, August 29th, September 24th, October 31st. The dates of the November

and December attacks were lost. In 1865—January 17th, February 12th, March 22d, April 19th, May 10th, and June 10th.

The eyes are used without restriction or fatigue, and in the interval are throughout perfectly normal, presenting no trace whatever of the affection.

Dr. Jeffries was inclined to think that a solution of this case will be found in the connection between the uterine system and the innervation of the eye. It occurred to him that the experience of Brown-Séquard, in reference to the effect of excitation or nervous stimulation upon tissues in which vascularity is visible as in the eye, would be valuable. He hoped Dr. Derby would communicate with Dr. Séquard in reference to it. It seemed to him that his suggestions would be valuable.

Dr. Derby said the disease did not make its appearance for several years after the cessasion of the menses. It has greatly diminished from year to year.

Dr. Williams, (of Cincinnati,) had an imperfect recollection of a case, which was very obscure to him at the time, and which he had never yet been able to comprehend. It cannot depend upon the suppression of the menses, because this was in a young man. He came to him with a very marked congestion of the sub-conjunctival tissue in one eye, commencing on the inner side, but not confining itself to that portion of the sclerotica, extending itself in the course of twenty-four hours over the whole surface of the globe. It never led to any opacities of the cornea, and almost disappeared in the course of thirty-six to forty-eight hours. Astringents had no effect upon it. It was evidently a case of congestion of the sub-conjunctival tissue, recurring periodically. He treated the young man during four or five different attacks, and they lasted from thirty-six to forty-eight hours, and the disease usually travelled round the whole cornea, involving the whole sclerotica, accompanied by a great deal of pain during the first few hours. The intervals between the attacks were from eight to ten days. The attacks occurred regularly once a week soon after that. Dr. W. treated him without success, although he has now recovered.

Production of Sex.

M. Thury's ingenious hypothesis on the production of sex has been for some time before the world, and has, we believe, from practical men engaged in breeding, received some confirmation. According to the Genevese Professor, every ovum passes through two phases or degrees of maturation, and accordingly as fecundation takes place at the commencement or toward the termination of such period females or males are produced. M. Coste described to the Academy of Sciences some experiments he has made in the matter with regard to multiparous animals—viz., fowls and rabbits—and the results are in no wise confirmatory of the doctrine laid down by M. Thury, the sexes being sometimes intermingled, and at others the reverse of what might have been anticipated. —*N. Y. Med. Journal.*

Observations on Typhoid (Intestinal) Fever in the Pig.

From the *Brit. Med Jour.* we learn that Dr. William Budd, of Clifton, read a paper on the above very remarkable disease before the Bristol Medical Association. It appears that the disease was first brought to the notice of Dr. Budd by Professor John Gamgee, of the New Veterinary College, Edinburgh. On the 27th of August last, a letter from that gentleman stated—1. That an outbreak of typhoid fever, attended by ulcerations of the intestine, had occurred among pigs in the neighborhood of Edinburgh; 2. That the disease had been imported by stock from Wolverhampton; and 3. That he had succeeded in stopping its spread by measures—Dr. B. inferred from the note—directed against contagion.

A whole pig, dead 36 hours, was packed in ice and sent to Dr. Budd, who was almost deterred from the examination by the extreme fetor of the carcass. Upon examination, however, it was found that the intestinal follicles presented alterations which, although limited in extent, and differing somewhat in the order of their distribution, bore a close resemblance to the well-known ulcers of the typhoid fever of man.

In following the course of the ileum downward, the last six or eight patches were somewhat more conspicuous than common; but the only really characteristic changes were confined to the large follicular patch, which in the pig, as in man, is seated immediately above the ileo-cæcal valve; and to a cluster of the smaller follicles which beset the cæcum.

The Peyerian patch immediately above the valve was very vascular and much thickened, standing out in strong relief on the surface of the gut. This patch was the seat of three ulcers, of irregular oval shape, varying from a third to half an inch in diameter, and having their edges sharply cut. These ulcers had destroyed the mucous membrane through its whole depth. Their base—and the same observation applies to the ulcers found in the cæcum also—was formed by an adventitious deposit, presenting the general characteristics of the yellow deposit which occurs in the typhoid fever of man. In the cæcum were counted six other ulcers, for the most part of smaller size, but presenting precisely the same appearances.

The mesenteric glands corresponding to the ulcerated follicles were much enlarged and highly vascular. The rest of the intestinal canal presented nothing abnormal.

This was the only case he saw, until three weeks after, he learned that some pigs had died at the Clifton workhouse, of an intestinal fever, where he found that the subjects of the disease were a lot of ten young pigs recently bought in

Bristol Market. When first brought to the workhouse, they all appeared quite well; but, about a week afterward, more or less, two or three of their number began to show signs of illness. The disorder, however, did not attract much attention until, at feeding time one morning, one of the pigs was found lying dead in the stye. On minute examination, it was discovered that five or six of the remaining nine were already in various stages of the same complaint. Two days afterward, another pig died; and, before a week had passed, five more had perished. The disease followed in all an exactly similar course.

A better general idea of the malady cannot be given, than to say that, as far as outward signs go, it is the exact counterpart of typhoid fever in man; more rapid, indeed, and more deadly; but in all essentials singularly like to the human fever.

Thirst, loss of appetite, sudden loss of strength, great dulness, and an indisposition to move, were the first symptoms to challenge attention. From the peculiar fixed way in which the sick animals held their heads, the master of the workhouse had come to the conclusion that, in the first stage of the malady, they suffered severely from headache. These first symptoms were either attended or soon followed by profuse diarrhœa; the liquid ochre-colored stools presenting a striking resemblance to those which occur in the human fever. As death drew nigh, the bright yellow hue of the evacuations generally gave place to a dark olive, or to various shades of chocolate; this last tinge being due to a greater or less admixture of blood.

In the early stage there was in all great heat of skin; and the pulse continued to be frequent throughout. As the malady advanced, the tongue became dry; sordes collected about the nostrils; and the belly was more or less tympanitic. In some, a special loss of power, almost amounting to paralysis, befel the hinder extremities, in the latter stages of the comlpaint.

At the onset, the whole skin was said to be the seat of a bright-red exanthem—a characteristic which appears to have been long familiar to pork-butchers, and which, from the resemblance of the color to the military red, has earned for the malady the slang name of the "soldier."

In the most rapid case, death occurred as early as the fourth day after the first discovery of marked illness. Other subjects held on to the eighth, twelfth, sixteenth, and one to the twenty-sixth day. The total duration of the outbreak, counting from the seizure of the first to the death of the last pig, was rather over six weeks.

In six of the above cases Dr. Budd made more or less complete *post mortem* examinations, when he found that the first stage of the local affection appeared to be marked by the development (amid all the phenomena of acute inflammatory disturbance) in the substance of the mucous membrane, and in the submucous tissue, of an adventitious deposit (or cell-growth, rather,) resembling in many of its characters, the well known yellow matter of human typhoid fever.

The seat of this new formation is marked by circular or oval patches, varying in diameter from a quarter of an inch to two inches, which attract the eye by their striking contrast in color to the surrounding membrane, and by their standing in relief upon it. The tinge of these patches varies from brownish yellow, through chocolate, to deep violet.

In a more advanced stage, the corresponding mucous membrane is found fretted with numerous small ulcers, or has entirely disappeared over the whole extent of the morbid deposit, which then forms the base of the sore.

In some specimens, the ulcers now appear in the form of deep excavations. In the greater number, however, the ulcerative process is concurrent with an exuberant outgrowth of the new formation already described, and in such wise that the ulcerations present a series of more or less fungoid elevations on the surface of the mucous membrane. A similar tendency, but in slighter degree, is exhibited in certain cases of typhoid fever in man. The resulting changes, in fact, form the subject of one of Cruveilhier's most effective plates.

Dr. B. is but little acquainted with the disease aside from these cases, but feels confident of the following points:

1. That in single instances, occurring chiefly, as it would seem, in Irish pigs, the disease has been well known to pig-factors here for twenty years or more.

2. That, until within the last year or eighteen months, it has never been known to be epidemic in this neighborhood.

3. That since that date it has spread over a wide extent of country, and has caused a very large mortality.

4. That it is in the highest degree contagious.

5. That, like all the other contagious fevers, it sometimes springs up, nevertheless, in subjects that have never been in direct communication with others laboring under this disorder.

6. That in the homesteads in which it has been the most fatal, no other living inmate, whether man, bird, or beast, has suffered from it.

7. That, in many parts of the kingdom, the disease is still entirely unknown.

The chief point of interest is whether this disease in the pig be identical with the typhoid fever which afflicts our own race. Rightly interpreted, the writer believes that neither the natural history of the disease nor its morbid anatomy at all warrants such a surmise. To establish identity in a case like this, it is necessary not to show pathological resemblance merely, but that the germ of the one species of fever is capable of producing the other. Now, not only is there no proof of this in the case before us, but the whole evidence, as far as we yet know it, points the other way. The diseases are analogous, and this porcine fever bears the same relation to typhoid fever in man, that sheeps' small-pox does to human variola. It is chiefly in the fact that the same laws govern the propagation of the typhoid fever in pigs as govern it in man.

Malarious Fever.

Quinia may be given in scruple doses, whether there are head symptoms, delirium, coma, or pain in the liver; whether it be in the hot stage or

cold. Quinia is not only safe for all forms of malarious fever, but its certain cure; and in cases where there is danger to life, the earlier and the larger the doses of quinia which can be given to the patient, the better. Vomiting and full cinchonism should be the only checks for continuing it in full doses. (Dr. E. Hare, on Treatment of Malarious Fever.—*Braithwaite's Retrospect*, July, 1865.) L.

Fermenting Milk in Phthisis.

Dr. Schnepp, an inspector of mineral waters at Eaux Bonnes, belongs to a class of practitioners who by preference seek for their remedies from among general measures and dietetic objects rather than from amidst the stores of the chemist. His attention, says the *Med. Times*, was drawn to the great immunity from affections of the chest enjoyed by the nomadic tribes of Baschkirs and Kirghiz, who wander about the steppes of Eastern Russia, and attributed popularly among themselves to their great consumption of mare's milk while in the state of fermentation, and termed by them *kumis*. Although admitting, also, that the exposure to the free air enjoyed by these tribes and their almost exclusively animal diet may contribute to the immunity they enjoy, Dr. Schnepp has convinced himself that this abundant drinking of *kumis* plays no unimportant part in accomplishing the result, and he has determined to introduce an imitation of the practice. Of course, it can be only an imitation, as mare's milk in any quantity is not obtainable in France, and even that of asses, which M. Schnepp uses as substitute, is so expensive an article that he is obliged to dilute it with the milk of the cow. However, this may be immaterial, as the mare's milk was originally used merely from its abundance in the countries where this practice originated. But if M Schnepp cannot give us the original article, he can at least coin a scientific name—*galazyme* or *galactozyme*, or milk in the state of fermentation. In his experiments, conducted by adding yeast or other ferment to asses milk, at a temperature of from 15° to 18° C., good fermentation was produced, small bullæ being disengaged from the surface, and a mild acidity, accompanied by a slightly vinous flavor, being developed. The milk retains its whiteness and fluidity, and may be thus kept in a state of fermentation during two or three days, or even for a longer period. It is administered as soon as the fermentation has become complete. But this would form a too expensive preparation for general use, and M. Schnepp undertook a long series of experiments with a mixture of cows' and asses' milk in different proportions, finding that two parts of the latter with one of the former submitted to a temperature of from 15° to 18° C., entered into fermentation in from ten to fifteen hours, and was fit for use after twenty or twenty-four hours. A pleasant homogeneous fluid results, disengaging abundance of gas, having the odor of new wine, and imparting a pleasant acidulous taste. The Baschkirs and Kirghiz, after feeling their way a little with the mare's milk, so as to obviate the slight diarrhœa it at first produces, drink it in enormous quantities, commencing at two bottles a day, and going on to seven or eight, and in many cases even fifteen or sixteen. It is only during the great heats of summer, the drinkers remaining the while exposed to the open air, that these vast quantities are drank, a medium quantity being, however, from eight to ten bottles. It is found that, in proportion as the air is dry and hot, a larger quantity may be taken, and proves more efficacious, while in cold and wet weather less can be taken and less benefit even in proportion is derived. M. Schnepp, however, contents himself with much smaller quantities for his patients, beginning with half a glass fasting, and another in the evening, and increasing it gradually, according to its effects, the heat and dryness of the air, and activity of the habits of the patient. In a few days as much as two bottles may be given, but he has not gone beyond the maximum of five bottles. While taking the *galazyme*, all other forms of milk diet, uncooked fruit, and acid or crude articles of food are prohibited, the patient taking his most solid meal at the middle of the day. As to the physiological effects of *kumis*, no accounts have been published, nor has the process of cure under its use been watched by practitioners. One fact, however, has struck every one living near or among the nomad tribes resorting to it, namely, the rapidity with which a condition of *embonpoint* is attained, three or four weeks sufficing to render a patient scarcely recognizable. It is to be supposed that patients treated with *galazyme* derive from it some powerful elements of nutrition which are not exclusively dependent on the fermentation, since the carbonic acid and alcohol derived from this are equally met with in English beer. Its first effect is to appease thirst and excite the appetite, and when too fresh it may give rise to the generation of wind and diarrhœa. If the fermentations be continued somewhat further, these inconveniences cease, and constipation usually supervenes. Under small doses the urine becomes clearer, more limpid, and larger in quantity, this increasing as the dose is raised. At first the pulse seems but little influenced, but after the dose of the milk has been raised, for some hours after this has been taken, it becomes slower, softer, and larger—and that in persons in whom all other articles of diet, of even a glass of new milk, give rise to acceleration of pulse. "Like the *kumis*, the *galazyme* gives rise to a peculiar kind of calm inebriety, attended at most with a little loquacity, and followed by somnolence or sleep, with a strong inclination to quietude of mind and body, and a marked indifference to everything."

Bloody Sweat in Hysteria.

Dr. Franque records in the *Med. Times* the particulars of one of those cases which are every now and then met with in women the subjects of nervous affections. In the present instance, the woman, 45 years of age, had suffered for several years from hysterical convulsions, although menstruating regularly. She had already had three attacks of bloody sweating, which had been preceded by more than ordinarily severe paroxysms of hysteria, when Dr. von Franque saw her during the occurrence of a fourth. On this occasion, most violent pains in various parts of the body had preceded the hysteric convulsion; and when

this last had continued for an hour an abundant sweat broke out over the entire surface of the body, and this in the parts of the body which had been the seat of the severe pains was colored red in consequence of the presence of true red blood-corpuscles. As the sweat appeared, the convulsions and pains gradually subsided. The skin was entirely intact, and the sudoriferous glands must have been the source of the blood.

Epilepsy.

Dr. CAMPS read a paper before the Harveian Society on this subject, in which he defined epilepsy as a convulsive disease, accompanied by loss of consciousness. This disease usually appears with very short warnings, and sometimes with none at all. The fit lasts from a few minutes up to half an hour. Again, in a form named the "petit mal," there is only momentary loss of sensation and thought. This latter form of the disease had occurred in the case of a physician, a friend of the author. In the opinion of some authors, the "petit mal" is never recovered from. There is often before the invasion of an epileptic seizure a peculiar cry observed, and recently he (Dr. CAMPS) had, whilst passing through a country town, heard such a cry, which he had immediately attributed to its accompainment, viz., a fit of epilepsy. Patients rarely die of the fit. Women, children, and weak persons are more frequently attacked by epilepsy than strong men; occasionally the disease is quite incurable; but we may hope that such cases may gradually be limited in number. The proximate cause of a fit resides in the nerves, and although pathological changes may be found after death, these are frequently mere coincidences. With regard to treatment of cases of epilepsy, we may sometimes prevent attacks coming on by tying ligatures on the limbs where we suppose the irritation to commence. Disturbed digestive functions may be the origin of the irritation, and epileptic fits may be produced by anything which irritates the nerve centres. Some patients are thrown into fits by the slightest thing, and in one case a needle placed on a female patient's hand caused fits. Any excitement, indeed, disturbing either the body or mind, may give rise to an attack. We must then ascertain whether the disease is idiopathic or symptomatic in its character. If it be of the former class, the treatment must be chiefly hygienic. All things which cause fatigue or terror, or, in short, any unpleasantness, must as far as possible be avoided; and CELSUS had indeed indicated long ago the correct principles of the treatment of such cases, and the diet and regimen they should be subjected to. The diet should be of the simplest character, and even articles like cheese and pastry might bring on an attack. Mince pies have been known to cause an attack. With respect to drugs, bromide of potassium and belladonna were the best, although sulphate and oxide of zinc used formerly to be much vaunted. Symptomatic epilepsy is more easily treated, and may often be cured. The cause of it may reside either in the intestines or in any part of the external or internal parts. There were no classes of cases of epilepsy so amenable to treatment as the syphilitic variety. In such cases iodide of potassium is the great remedy. Ganglionic epilepsy has also been spoken of. Summing up the whole of his paper, he (Dr. CAMPS) would say that we may reasonably expect a cure in epilepsy (1) when the primary cause is known and is removable; (2) when syphilis is the cause; (3) in the milder cases of idiopathic epilepsy.

Mr. JAKINS had hoped that Dr. CAMPS would have given more hints as to the value of various drugs in epilepsy; but he had chiefly dwelt on hygienic means of treatment. This, he said, disappointed him. Spasm of the arteries of the brain was, be believed, the proximate cause of epilepsy. Irritation of the sexual organs was much benefited by bromide of potassium. A little female patient with fits had slept for years with her brother, and on being removed to another bed was much better.

Mr. SEDGWICK thought that, in cases where the disease was hereditarily transmitted, there was little chance of doing much good by any remedies. It had been remarked that in the treatment of epilepsy all remedies did good *for a time;* and this probably took place by their action upon the imagination and *morale* of the patient. Bromide of potassium had been found to be very useful in treating certain cases, and he had found it to do much good in one case in a young married woman.

Dr. BROADBENT thought the plan of treatment was to find out, if possible, a functional cause of epilepsy. He had frequently seen much relief from belladonna, and one remark he thought important was, that if we used belladonna *much* of it should be given. He had seen some cases recover under belladonna. Bromide of potassium was also of great service in many cases. In syphilitic cases of epilepsy he had seen a cure effected by means of iodide of potassium, and another from bromide of potassium. In the case of a boy with fits, he was much benefited by belladonna, and bromide of potassium had cured him. He was convinced of this fact.

Dr. CAMPS attached great importance to belladonna and bromide of potassium, but thought that rigid attention to diet was of the greatest importance of all. Hereditary cases were certainly the most unpromising, but if we cannot cure, we may often alleviate such cases by means of belladonna and bromide of potassium. The treatment of epilepsy was becoming less and less empirical.

Source of the Phosphates in Bone.

Large masses of phosphorus are, says Dr. HOFFMAN's Report, in the course of geological revolutions, extending over vast periods of time, restored from the organic regions of nature to the mineral kingdom by the slow process of fossilization; whereby vegetal tissues are gradually transformed into peat, lignite, and coal; and animal tissues are petrified into coprolites which in course of time yield crystalline apatite. After lying locked up and motionless in these forms for indefinite periods, phosphorus, by further geological movements, becomes again exposed to the action of its natural solvents, water and carbonic acid, and is thus restored to active service in the organisms of plants and lower animals, through

which it passes, to complete the mighty cycle of its movements into the blood and tissues of the human frame. While circulating thus, age after age, through the three kingdoms of nature, phosphorus is never for a moment free. It is throughout retained in combination with oxygen, and with the earthy or alkaline metals for which its attraction is intense.—*Report on Chemical Products in Exhibition of* 1862.

Abuse of Alcohol.

In a paper communicated to the French Academy of Medicine by M. Lancereaux, on the changes produced by the abuse of alcohol, he observes that, since 1858, he had been engaged in tracing out the specific anatomical characters due to the action of certain agents. Last year, he did this with regard to the poison of syphilis, and now he gives the result of his investigations on alcohol. Accidental or acute alcoholism is found connected with special forms of ordinary affections. Thus, Tardieu has referred to its agency certain cases of hemorrhage of the membranes and ventricles of the brain and of the lungs; and some of the inflammations with rapid suppuration of the lungs and liver, and more rarely of the brain, derive their rapidly fatal character from the absorption of too much alcohol. But it is to lesions connected with prolonged abuse of this fluid that M. Lancereaux especially directs attention, and these he thinks may be conveniently considered under two principal heads. In one of these the organic connective tissue is principally concerned, giving rise to affections analogous to the adhesive inflammation of Hunter; and in the other, special modifications of the functionary element are produced, giving rise to lesions generally known as fatty degeneration.

The first of these alterations spares but few organs, invading the recesses of the parenchyma, or developing itself on the surface of the membranes; but the liver, brain, kidneys, and serous membranes, are the portions of the frame especially attacked. The liver may be taken as the model organ for exhibiting its effects, and the changes operated in it have been characterized by the English writers under the term cirrhosis. In thirty-five cases, M. Lancereaux has always observed precisely the same characters, differing only in their degree of evolution. A very analogous alteration is observed in the brain, this organ diminishing gradually in size, the convolutions undergoing atrophy, especially at the upper portion of the hemisphere, the brain also becoming colorless, and acquiring a firmer consistence. The arachnoid and pia mater are usually at the same time infiltrated, thickened, and strewed with whitish points or plates. The kidneys sometimes exhibit a condition analogous to that of the liver; but M. Lancereaux has not observed the condition of chronic pneumonia described by Huss. The mucous membranes of the stomach and cæcum are especially characterized by injection and hemorrhagic punctuation, appearances also observed in the bronchial and especially the laryngeal mucous membrane. Finally, the coats of the vessels which especially come in contact with the products of absorption exhibit deposits capable of contracting or even obliterating their cavities. This is the case with the vena portæ and the pulmonary artery.

The alterations of the second class are characterized by the presence of fatty degeneration; and here, too, the liver is especially the organ affected, assuming an augmented size, but in its antero-posterior direction, which gives it a cubic form distinctive from other forms of fatty degeneration. The kidneys, pancreas, the salivary and gastric glands, the bronchial epithelium, and even the spermatic canals, may all exhibit this degeneration; the muscular fibre, bones, and cartilages participating in the change. The relative frequency of the two orders of alterations is not constant; for while fatty degeneration may be said to be constant in certain organs, as the liver, chronic adhesive inflammation has only been met with thirty-five times in 130 cases; but one point is observable, that while adhesive inflammations have for the most part been observed in persons pursuing laborious callings, fatty degeneration has almost always been met with in the sedentary. With respect to the mode of production of these different lesions, it may be suggested that the adhesive inflammations are due to the more direct action of the alcohol on the tissues, the effect of which is not very different from that produced by the injection of alcoholic fluids into the tunica vaginalis. The chief seats of the lesion would seem to support this view, since the organs which are most directly influenced, as the vena portæ, liver, and pulmonary artery, are also those which are oftenest attacked. The fatty degeneration would seem to be dependent on the impaired nutrition, itself connected with the diminution of the exhalation of carbonic acid.

"An important point to be noticed is the resemblance which this latter alteration bears to that consequent on the progress of age. In the drunkard, as well as in the aged, we have progress atrophy of the brain, increase of the cerebro-spinal fluid, fatty degeneration of the minute vessels, of the substance of the heart, and of most of the anatomical elements, dilatation of the pulmonary vesicles, ossification of the costal cartilages, and a substitution of fatty for osseous substance. So close is this resemblance, that it may be stated without exaggeration that, in the majority of cases, alcoholism produces an anticipated senility. What is true in physiology holds good also in pathology; for in the course of most diseases, and especially of acute diseases, there are exhibited in the drunkard and the aged person but few differences in the mode of action of the nervous system and in the power of the economy. —*Medical Circular.*

Climacteric Insanity in Women.

The following summary of statistics is presented in the *Edinburgh Medical Journal*, in reference to this species of insanity, by Dr. Skae, physician to the borough asylum of Birmingham:

"1. The symptoms of insanity occurring at the climacteric period in women, are so uniform, characteristic, and peculiar, as to render it easily recognizable, and entitle it to be referred to a

distinct natural group or family, which may be distinguished as climacteric mania or insanity. 2. This is one of the most curable forms of insanity accompanied by melancholia. 3. The duration of the insanity in curable cases rarely exceeds from three to six months. 4. This form of insanity, apart from suicide and organic disease, rarely tends to a fatal termination. 5. The most important indications of treatment are, the early removal from associations and friends, careful watching, nutritious diet, and the judicious administration of narcotics."

Pleuro-Pneumonia.

From the *Australian Med. Jour.* we learn that Mr. THOMAS S. RALPH read a paper before the Medical Society of Victoria, with the following title:

On the parasitic nature of the disease in cattle termed Pleuro-pneumonia, and the probable relation of some obscure diseases of the human economy: (i. e., Amyloid Degenerations and Cancerous Deposits,) to parasitic origin.

When the blood of animals affected with pleuro-pneumonia was first subjected to microscopical examination, it was found to present abnormal appearances; the lung tissue was found to exhibit "stearine bodies" and "saccules," their occurrence could not be referred to or connected with the usual products of inflammation; the former were observed to undergo change by keeping in glycerine, the latter were also encountered in the lungs of a fœtal calf, the mother suffering from pleuro-pneumonia.

The occurrence of several cases of pleuro-pneumonia presenting cysts in the lungs and liver, and some of their contents showing great similarity to "saccules," led to the suspicion that saccules and stearine bodies might have originated from cysts.

Mr. RALPH states that he found that out of nineteen cases of pleuro-pneumonia, distoma (fluke) was found nine times; fourteen out of the same number (nineteen) had cysts either in the liver or lungs, or in both; seventeen therefore out of the nineteen giving evidence of parasitism in one form or another; ova found in one lung cyst; that organisms referable to germ cells in the fluke are to be found in the blood of diseased animals, as well as plastic amorphous amyloid bodies; organisms like these last having been also recognized in the lung tissue, and muscular tissue, and cysts. Placing these facts together, and finding also a considerable amyloid reaction can be obtained in the several organisms, and in the organisms in the blood, it becomes highly probable that such amyloid condition is one of an abnormal kind in the animal economy; and when we reflect on the observations of others which point to the presence of amyloid deposits in organs remote from the liver, and likely to have been secondarily affected to the lungs or liver, (the latter of which generally appears to have been subjected to a prior disturbance,) we may fairly infer that some weight is to be attached to the discovery of amyloid reaction in connection with distoma as a parasite, and have good reason to endeavor to trace back amyloid deposits in the human subject to some previous parasitic invasion, most probably in relation to the liver; and may not such extensive conditions of degeneration be regarded as the result of an effort in the system to exclude from it a noxious element, but without avail; while some cutaneous disorders may be actions of a similar kind, and perhaps afford a more successful issue to the efforts of nature.

The term contagious can hardly be applied to this disease (pleuro-pneumonia), as we are not yet acquainted with the mode in which it is communicated. The term contagion should include a necessity for contact or something equivalent to it. It is probable a diseased animal may get rid of some parasitic element which may eventually gain access to another animal without actual contact; hence we had better consider the disease a communicable one, without assigning to it a more precise term at present.

In a case of hydatid cyst brought before the notice of the Medical Society, by Dr. TRACY, at the last meeting, Mr. RALPH detected chemical reaction by iodine in most of the amorphous bodies which are to be seen in the curdy mass contained in the cyst; thus proving its chemical relationship to the cysts found in the cases alluded to in pleuro-pneumonia, and proving that it also possesses an amyloid character to some extent.

The President, Dr. MARTIN, expressed himself highly gratified with Mr. RALPH's paper. It suggested a field of inquiry in which valuable practical information might be found concerning the agencies of causation of a large class of diseases that were extremely obscure, notwithstanding the great advance that had of late years been made in the study of pathology. Many instances of inflammatory action occurring without obvious causes might be found to be due to parasites. He referred to a case related by Dr. GIRDLER, in which extensive inflammation of the lung and pleura had been traced to the existence of a hydatid cyst in the lung.

Mr. GIRDLESTONE thought more might be said as to how the parasites gained admission into the system. He wished also to have clearer information as to the mode in which the amyloid bodies passed from the blood into the fluke, and from the fluke into the blood. The conclusions respecting the transmission of the amyloid bodies into the blood were, as it seemed to him, quite theoretical. The report of the pleuro-pneumonia commission had been to the effect that parasites were not constantly found in the diseased tissues of cattle that had died of this affection.

Dr. BLEASDALE would suggest to Mr. RALPH not to rely too strongly upon the reaction obtained by iodine. Sulphuric acid and other reagents might distinguish these bodies into a class by themselves. He anticipated important results from the use of magenta in microscopical researches, and he would commend it to Mr. RALPH as likely to aid him not inconsiderably in his investigations.

Mr. RALPH referred to the diagrams by which his present paper was illustrated, in which the amyloid bodies found in the blood were clearly

indicated. There was no more difficulty for the ova of parasites than for bile to pass into the blood. Andral had found hydatids in the pulmonary veins without the aid of the microscope. Dr. Budd had given confirmatory testimony on this point. In the evidence quoted in the report it had been shown that, in seventeen out of nineteen examples, parasites had been found. He had not recorded the results he himself had obtained, until he had confirmed them by repeated experiments.

On the motion of Dr. Neild, seconded by Dr. Black, the thanks of the Society were accorded to Mr. Ralph.

Pathology of Hydrophobia.

In a course of lectures in the *Dublin Med. Press* on hydrophobia, by Dr. T. C. Shinkwin, from the manuscript notes of the late Dr. T. S. Holland, of Cork, the following conclusions are given in reference to this disease: 1. No one of the morbid appearances that are stated to have occurred in autopsies made on persons who died of hydrophobia, nor all taken collectively, could produce the symptoms essential to that disease, and that it presents phenomena for which none of these pathological changes can account. 2. Hydrophobia can proceed to a fatal termination without leaving in the dead body any trace of diseased change. 3. All the pathological appearances hitherto recorded must be considered as secondary or accidental lesions, to none of which can be assigned the place of *the proximate cause*, which is still unknown. 4. From a consideration of the sudden, interrupted, intense, and rapidly fatal character of the symptoms, it appears highly probable that as the blood is the most generally diffused and rapidly circulating medium, it is the receiver of and agent through which the nervous system is acted on by the poison, and excited by it to produce the symptoms characteristic of hydrophobia. 5. Presuming the correctness of the last conclusion, it follows from it that treatment should be directed to remove the altered condition of the blood, and that attention should in all future autopsies be directed to discover the physical, chemical, and microscopical changes occurring in it and in the nervous system. 6. If it be necessary to give this disease a nosological order, it should be placed among a series of affections that may be included under the general term of toxo-sanguineo-nervous diseases.

The Thyroid Gland.

During a lecture, recently published in the *Dublin Med. Press*, by Mr. Arthur W. Foot, upon the Thyroid Gland, the following opinions were given as to its function. It acts as a diverticulum to the cerebral circulation, exercising its secretory function alternately with the brain. (Simon.) There is a direct relation existing between this gland and the utero-ovarian function. Ninety per cent. of goitre, or the enlargement of this gland, occurs in women, and its periodical turgescence during menstruation and pregnancy suggested a connection between the sexual apparatus and this gland. (Sir Charles Laycock.) Acute inflammation of this gland sometimes follows the sudden subsidence of orchitis. (Eulenberg.) Mr. Foot says, that in countries where goitre and cretinism are endemic, there are two classes of cretins, the goiterous and ungoiterous; in the former the sexual organs are monstrously developed, while in the ungoiterous, there are no marks of sexual maturity. In lower animals, as mules, where sterility is a well-known fact, it will be found in these countries that they are frequently affected with thyroid swellings. To the spinal marrow, situated between the sixth cervical and the fourth dorsal vertebræ, Budge assigns the function of a centre for the cervical portion of the sympathetic nerve (centum ciliospinale,) presiding over the influence of the sympathetic nerve on the movements of the iris and the bloodvessels of the head. Derangement of this centre, primarily or indirectly through changes beginning in the thyroid gland, and secondarily affecting this centre, appears to produce that derangement of the vaso-motor nerves of the head, producing the violent palpitations and turgescence of the capillaries of the face, scalp, etc., etc., with exophthalmia and broncho-cell, the investigation of which disease is so intimately connected with the names of Graves and Stokes.

Fluctuating Tumor of the Hip caused by Parasitic Animals.

The *Brit. Med. Jour.* brings the report of a case as above, by Wm. Hendry, M. R. C. S., of Hull. The patient, a young lady, aged 21, has noticed from 10 years of age, the left hip and thigh to be weak and occasionally painful. Symptoms increased during last winter, a rapidly increasing swelling making its appearance on the affected hip. Movements impeded and painful, causing awkwardness of gait, and preventing any extended walk. Swelling, during the latter part of May and beginning of June, (1865,) has become much extended and diffuse.

Drs. Hendry and King saw the case on June 8th. Fluctuation in the tumor was accompanied by a peculiar crepitus, resembling that perceived in bursal enlargements. Though the skin was not at all inflamed, the tumor is more painful than is common in ordinary superficial chronic abscesses.

The tumor was punctured, and a pint and a half of semi-opaque, yellowish fluid discharged—the cyst even then not being completely emptied.

Microscopic examination demonstrated the existence of innumerable hooklets of echinococci in the liquid drawn off. Every drop, under the four tenths or one-fourth of an inch object-glass, showed abundantly the presence of these parasitical formations. The parasite itself was not obtained entire; but various portions were viewed in a greater or less degree of decomposition. Along with the debris of echinococci were observed minute cubic crystals of chloride of sodium and cholesterine.

The case, as remarked by Dr. Hendry, is interesting, as showing the voluntary muscles to be liable to the incursion of these parasites, as well as the brain, liver, and other organs. L.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SEPTEMBER 2, 1865.

THE BRITISH MEDICAL ASSOCIATION.

The above Association, which seems to hold the same relation to the profession of England that the American Medical Association does to that of this country, held its thirty-third annual meeting in the town of Leamington, on August 1st to 4th inclusive. Leamington is a celebrated watering-place in the central part of England, not a great way from Birmingham, and two miles east of the ancient town of Warwick. Its springs are saline, containing sulphate of soda, and chlorides of sodium, calcium and magnesium. It is very accessible from all parts of the United Kingdom, and a popular and exceedingly pleasant place of resort. It is a question whether the policy of occasionally meeting at some of our watering-places would not be a good one for the American Medical Association. Saratoga, Newport, Cape May, Old Point Comfort, the White Sulphur Springs of Virginia, and of Ohio, Lookout Mountain, and other places that might be named, would afford an agreeable variety to the present plan of meeting exclusively in large cities.

There was an attendance of 234 delegates, out of a membership of 2,368—a small attendance compared with ours, though we presume that there is, as there should be, a more limited representation than obtains among us.

It is observable that among our British brethren the Presidency of the Association seems to be accorded, without dispute, to the place of holding the meeting. Thus, in 1864 the Association met in Cambridge, and Dr. G. E. Paget was the President, who, at Leamington, after opening the meeting, retired in favor of Dr. Samuel J. Jeaffreson of that place, who in turn next year, when the Association meets by invitation at Chester, will retire in favor of Dr. Edward Waters, of that place.

After the formalities of the retiring of the old President and the induction of the new, together with the reading of his address, the report of "Council" was made. This body has the general business management of the affairs of the Association, which it reports to be, in every respect, in a prosperous condition. They report that during the year 30 members died, 65 resigned, and the names of 70 were erased for the non-payment of arrears. During the year 133 new members were added.

Instead of, as with us, publishing its proceedings in a separate volume, the British Association publishes a weekly periodical—*The British Medical Journal*—an ably conducted enterprise, creditable to the profession of Great Britain. The financial statement of the Council seems to have chief reference to the expenses of this periodical. The receipts in 1864 were—

	£	s.	d.
For subscriptions, ...	2,501	2	0
" advertisements and sales,	633	16	6
	£3,135	13	6

The expenditures were (almost entirely on account of the *Journal*) £2890 16 9½, leaving a balance in favor of the Association of £243 16 8½—a very good financial showing. The subscription to the *Journal* to members is £1 1, to non-members £1 6.

Among the items of business reported on by the Council, is, that steps were in progress to secure from Government a Charter of Incorporation for the Association, which would cost about £300. The subject was discussed subsequently at considerable length, the objections urged against the charter being principally on financial grounds. It was, however, unanimously decided to continue the effort to procure the charter at as early a day as practicable.

The first report of the "Medical Provident Society" was made. This elicited a good deal of discussion subsequently, there being considerable opposition to the society manifested. It was, however, sustained by a strong vote. This and "The Medical Benevolent Fund," appear to be medical beneficial societies in connection with the Association.

The Council reported the voting of the "Hastings Prize Medal" to Dr. D. Herbert Barker, of Bedford, for his essay on Hygiene. Sir Thomas Hastings, the founder of this Prize, seems to hold the relation to the British Medical Association that Dr. N. S. Davis does to the American Medical Association, being its originator and most enthusiastic supporter. We observe that great deference was paid to his opinions and advice.

In examining the proceedings of the meetings of British medical societies, and in reading the editorials and communications in their medical journals, one is struck with the prominent place held in British medical politics by the relations of medical men to the poor-laws of the country. There is a far larger class of poor in Great Britain who are unable to pay doctor's bills than in this country, and how to make provision for them in sickness as well as in health, at the cheapest pos-

sible rate, is a problem that the poor-law commissioners are called upon to solve. Hence inadequate provision is made for remunerating medical men for their services to them. As a consequence, this subject occupies much space in the journals, and much time in the medical societies of Great Britain. A committee was appointed, a part of whose duty was to insure just remuneration to Poor-law medical officers.

An effort was made to cut the Association loose from its representative organ, the British Medical Journal. Mr. Robert B. Carter, of Stroud, took the lead in opposition to the Journal, but his arguments were puerile, and only seemed to have the effect of showing that he was actuated by some private grudge, and to bring the friends of the enterprise to the rescue, and the following declaration was passed, unanimously—or rather, we suppose, none dissenting—"That it is inexpedient to disturb the existing arrangements with regard to the Journal—(*a*) because Dr. Markham [the editor] has proved himself quite equal to the responsibilities devolving upon him; (*b*) because the tone and management have gone on improving; and that general support and sympathy from the members of the Association, especially those connected with the public medical and surgical institutions of the kingdom, are alone wanted to make the Journal an organ suited to carry out the principles upon which the Association is founded." A small balance of about eight pounds against the Association last year, was the point on which the opponents of the Journal rallied, but unfortunately for them there was a balance in favor of the Association this year of about two hundred and forty-four pounds, with a good prospect of its increasing considerably during the year. Whatever real ground there may be of complaint against the Journal the profession itself is responsible for. Let them rally to its support, and furnish Dr. Markham with the means, and they will have no occasion to complain of it as a literary enterprise. Its present income represents, we should judge, a list of about two thousand subscribers. The Association numbers nearly 2500 members; let them all support the Journal by their subscriptions, influence and pens, and there would be no room for invidious comparisons with other journals. But while we say this much for the Journal, we must admit that we have not much confidence in the association principle in the management of such an enterprise. It would be more efficient and useful in private hands, in our opinion.

Entertainments to the delegates formed a marked feature of the sessions of the Association, as it does in our own Association. Of these, there seem to have been three: a "*soirée*" on Wednesday evening, in a public hall, which seems to have been given by the profession of Leamington; a public "*déjeûner*" given in a spacious marquée, erected in the Jephson Gardens, this compliment was paid by the inhabitants of Leamington, and, lastly, the President's "*conversazione*," also given in a public hall, given by the President of the Society, Dr. Jeaffreson. We notice that at these entertainments opportunity was afforded for the exhibition of instruments, surgical apparatus, microscopes, medicines, etc., and the walls were decorated with portraits, autographs, and medals of medical celebrities, and there was quite a large collection of medical curiosities, some of them very ancient. These were contributed for the occasion by inhabitants, and some of them were brought from a distance. These re-unions seem to have been very pleasant affairs; toasts, speeches, and pleasantries being in order. Fireworks and illuminations constituted a part of the entertainment given by the inhabitants of Leamington. Ladies are spoken of as having taken part in the entertainments.

In our next we will speak of the addresses, papers, discussions, etc., that the meeting called forth.

Notes and Comments.

Literary Weeklies.

One of the great literary wants of our country has been a class of weekly papers of a high order, devoted to general literature, news, and other interesting topics of the day. Just before the war commenced, and about that time, several attempts were made to initiate such enterprises, but the high prices that prevailed during the war compelled a discontinuance of the papers. Since the return of peace, two of the papers that had been discontinued have been revived, viz., *The Saturday Press* and *The Round Table*. They were both very acceptable and well-conducted, and we hope they may now be successful. In addition to these, there are other candidates for public favor, viz., *The Nation*, *The Citizen*, and *the New York Review*. There may be others, but those named are all that have fallen under our notice. Of these, *The Nation* is a new enterprise, and has all the elements necessary to secure success. The numbers that have issued are very creditable, both in their contents, typography, and general getting up, with a single exception, that is

the mingling up of advertisements with the reading matter. We are surprised at this lack of good taste and judgment, and hope it will be speedily corrected. For a literary weekly, we heartily recommend the *Nation*. Mr. JOSEPH H. RICHARDS is the publisher, and it numbers among its contributors some of the best writers of the country. *The Citizen* is a continuation of the journal of the Citizen's Association of New York, and is intended, among other things, to subserve the interests of sanitary reform in that city. It is a sprightly, slashing sheet, with CHARLES G. HALPINE, Esq., as proprietor and chief editor.

We have not had the opportunity of closely examining the *Review*, and the *Saturday Press*, and may speak of them again. The prospectus of the *Round Table* has been published, but the first number of the new paper has not, we believe, issued yet. It was, when before published, an excellent paper, and we shall look for an improvement, rather than a degeneration.

All the above papers are published in New York. It is a pity that so many have been started, as there is danger of their interfering with each other. The interest the medical profession takes in literary enterprises justifies this reference to a new direction that has of late been given to literary effort in this country. Weekly papers of the character commented on have been very successful in England, and they should be here.

News and Miscellany.

Statistics of Insanity.

Dr. H. G. STEWART, of the Crichton Royal Institution, Dumfries, presents in the *Journal of Mental Science*, the following statistics as obtained by him from the insane of the above institution:

I. *Sex.* There were 16 per cent. more males than females under treatment. 2. The females recover more readily than the males. 3. The number of deaths in each sex is nearly equal.

II. *Domestic Condition.* 1. Most of the patients were single. 2. The highest proportion of recoveries was among the married, the next among the single, and the lowest among the widowed. 3. The smallest proportion of deaths was among the married, a higher among the single, and the highest among the widowed. 4. The married with offspring had a much greater chance of recovery, and a much less chance of death than the married without offspring.

III. *Education.* 1. Those having a superior education recover less frequently than those whose minds are not so highly cultivated. 2. Those having moderate and indifferent educations have the best chance of recovery. 3. The highest mortality occurs among those whose education is indifferent.

IV. *Occupation.* 1. Members of the learned professions have much less chance of recovery than men in any other occupation. 2. Artisans have the largest proportion of recoveries among them, proprietors next, commercial men next, and architects, engineers, etc., next. 3. Death is more frequent among the members of the professions, and less so among the other classes. 4. Among the females, the fewest recoveries are among the affluent class, and the greatest in the commercial and artisan class. 5. The deaths among females are more frequent in the artisan and affluent than in the commercial class.

V. *Cause.* 1. The ascribed cause of insanity is much more frequently physical than moral. 2. Moral causes are more frequent among the females than the males. 3. Moral causes, both among males and females, produce an insanity more easily curable than physical causes. 4. Death in both sexes occurs more frequently among cases of mental disease produced by moral than by physical causes. 5. One-half of the cases were hereditary; and 12 per cent. of them were ascribed entirely to hereditary transmission. The cases produced by easily removable causes are the most curable.

VI. *Age at which the Insanity first appeared.* 1. The greatest number of first attacks occur between the ages of 20 and 30 years. 2. The highest percentages of recoveries occur in those attacked at the climacteric period; namely, between the ages of 10 and 20, and 40 and 50 years. 3. The recoveries are next most frequent in those first attacked between 20 and 30; and as life advances (with the exception of those in the disorder mentioned in the preceding paragraph), the chances of recovery diminish. 4. The percentage of death is higher the greater the ages at the first appearance of the insanity.

VII. *Number of Attacks.* 1. 66 per cent. of the cases admitted are first, 15 per cent. second, 7 per cent. third, and 9 per cent. frequent attacks. 2. By far the lowest proportion of recoveries takes place in those that suffer from the first attack; and those having a second or frequent attacks recover in a much higher proportion. 3. The proportion of deaths is higher in the first, and generally lower in the frequent attacks.

VIII. *Duration of Attack prior to Admission.* 1. The earlier the patient is placed under treatment, the greater is his chance of recovery. 2. The number of deaths is fewer in those admitted soon after the appearance of insanity, than in those in which the disease has existed for longer periods.

IX. *Bodily Health.* 1. Nearly one-half of the cases had good bodily health; in 31 per cent. it was indifferent; and in 18 per cent. it was bad. 2. The recoveries were high among those having good; but highest in those having indifferent; and lowest in those having bad health. 3. The deaths were lowest in the first class, intermediate in the second, and highest in the third.

X. *Age on Admission.* 1. The greatest number of patients admitted are between the ages of 20 and 50. 2. Most recoveries take place in those whose age is between 15 and 20, and 45 and 55,

the two climacteric periods, (see heading VI.) 3. The proportion of deaths steadily increases in proportion to age.

XI. *Form of Mental Disorder.* 1. Mania was the most frequent form of mental alienation; next melancholia, next monomania, and next dementia. 2. After dipsomania, melancholia was the most curable, and after it mania and monomania. 3. The deaths were most frequent in fatuity and dementia, less so in monomania: and in mania and melancholia they were in the lowest proportion.

XII. *Duration of Attack.* 1. The greatest number of attacks of mental disease last for less than one year. 2. The longer the attack the fewer the recoveries. 3. The longer the attack the greater become the proportion of deaths.

XIII. *Duration of Residence in the Asylum.* 1. The mass of cases remain less than one year in the Asylum. 2. Such cases are the most curable. 3. More than one-half of those cases that remain only for a month die; and in those remaining six months the mortality reaches its minimum, and thereafter, in the longer periods of residence, on the whole, increasing.

Vocalization.

A very useful article has recently appeared in the *Philosophical Magazine*, written by Mr. J. BISHOP, F.R.S., proving how necessary it is, not only that the pitch of the tuning-fork should be uniform, but that it should be conformable to the structure and functions of the human voice. The greater portion of our best music, including the works of HANDEL, MOZART, and BEETHOVEN, was composed at a period when the tuning-fork made about 512 vibrations for C; but about half a century since, there arrived in this country German performers on wind instruments whose pitch was much more acute, and an erroneous opinion soon prevailed that the tones of wind instruments were improved by this higher pitch. Unfortunately the Philharmonic Society and the orchestral departments of the theatres fell in with this delusion—the Philharmonic adopting one pitch, the Opera another; and at length almost every maker of musical instruments chose his own pitch; thus has arisen the well known difficulty of getting together performers on even two or three instruments in perfect unison with each other, and also that of the singers themselves not knowing whether the music is or is not within the compass of their voice. In this state of uncertainty the Society of Arts appointed a committee to investigate the subject; and their recommendation was, that 528 vibrations be adopted for C, instead of 512—this being about a semitone higher than that in use in the time of HANDEL. The effect of this alteration in the fundamental pitch has been very important. The piano forte makers have been obliged to shorten their strings, the organ builders their pipes, and the flute makers to cut off a portion of their tubes; but as Nature has made no corresponding change in the length of the cords of the vocal organs, and in order to diminish the evils which the present pitch has inflicted on the human voice, very many of HANDEL'S and MOZART'S popular songs have been transposed by CALLCOTT and others into lower keys, so as to bring them as nearly as possible to that pitch sanctioned and used by the composers themselves. Now, although this transposition can be easily effected in short pieces of music, yet no one would think of changing the key of a whole oratorio or mass, and consequently many choral performers can no longer join in the execution of these celebrated productions. It appears that even Madam GOLDSCHMIDT herself, with her extended range, has complained of the strain which the change of pitch at the opera produced in her vocal organs. Moreover, it is well known that the tones at the extreme limits of phonation are never so pure in quality, or so agreeable to listen to, as the notes within these limits; and when the vocal cords are unduly strained they do not easily regain their elasticity, and both the melody and the range become seriously impaired. Many a fine voice has been thus ruined. Nor is this all; the effort and strain to produce some of the higher tones has not only given rise to spitting of blood, but has been known even to produce apoplexy. Sir JOHN HERSCHEL strongly protested against the decision of the committee of the Society of Arts, and Mr. BISHOP as forcibly urges the reduction of the pitch of C to its former limit of 512 vibrations; he also contends that the pitch of all musical instruments intended to accompany the human voice should be made *subordinate* to the anatomical and physical structure of the human vocal organs.—*Lancet.*

An Incident in the French Academy of Medicine.

A somewhat amusing incident took place lately at the Academy of Medicine in the discussion on aphasia. Prof. BOUILLAUD, in his ardent conviction that the faculty of speech must be localized in the anterior lobes of the brain, offered a long time ago a prize of 500f. to any one who would prove that that portion of the brain may be injured without causing any alteration in the power of speech. At the meeting, M. VELPEAU, who was not expected to speak, got up and quietly declared to M. BOUILLAUD that he had won the prize. He then proceeded to give the details of a case which had fallen under his notice at La Charité, and which he announced as conclusive. The fact itself, and particularly the humorous way in which it was presented, of course disagreeably surprised M. BOUILLAUD, who manifested his ill-humor by some expressions which M. VELPEAU declared to be unparliamentary. This was followed by an exchange of *aigre doux* compliments and witty hits, to the great amusement of the gallery. But M. BOUILLAUD soon recovered his usual equanimity, and closed the incident by asking the Academy to appoint a committee to judge whether the prize had been legitimately won or not.

Natural Selection.

MR. WALLACE, the English naturalist, in a paper recently read before the Anthropological Society, arrives at the following conclusions, which help to account for the variation and transmutation of species: (1.) Peculiarities of every kind are more or less hereditary. (2.) The offspring of every animal vary more or less in all parts of their organization. (3.) The universe in which

these animals live is not absolutely invariable. (4.) The animals in any country (those at least which are not dying out) must at each successive period be brought into harmony with the surrounding conditions. These are all the elements required for change of form and structure in animals, keeping exact pace with changes of whatever nature in the surrounding universe. Such changes must be slow, for the changes in the universe must be very slow; but just as these slow changes become important, when we look at results after long periods of action, as we do when we perceive the alterations of the earth's surface during geological epochs: so the parallel changes in animal form become more and more striking, according as the time they have been going on is great, as we see when we compare our living animals with those which we disentomb from each successively older geological formation.—*Annual of Sci. Discovery.*

International Sanitary Regulations.

An international agreement was signed at Geneva on the 22d of August, 1864, and ratified at Berne on the 22d of June last, by the representatives of France, Baden, Belgium, Denmark, Spain, Italy, the Netherlands, Prussia, and Switzerland. The preamble sets forth the desire of the powers in convention to mitigate, as far as may be, the evils inseparable from war, to suppress useless rigors, and to ameliorate the lot of wounded soldiers on the field of battle. Ten articles follow, guaranteeing the neutrality of military hospitals and ambulances, so long as they contain either sick or wounded, and remain unguarded by a military force; also, of all those persons legitimately connected with them during the exercise of their functions. In case of occupation by the enemy, these persons may continue to discharge their duty under neutral protection, or may rejoin the forces to which they belong, at their option. If they prefer the latter course, they shall be forwarded to the enemy's outposts by the army of occupation. The property of hospitals remains subject to the laws of war, but those who withdraw from them shall retain their private property. Ambulances will be entirely released. The inhabitants of the country who shall bear succor to the wounded shall be respected as neutrals, and shall be so forewarned by the generals on either side; and whatever house receives a wounded soldier shall have in him a safeguard, nor shall any troops be quartered upon it, nor any war-tax exacted of it. The sick and wounded shall be collected and cared for without regard to their nationality, and commanders-in-chief may forward to the enemy's outposts his wounded during the conflict, when circumstances permit and both parties consent. Those who, upon recovery, are found to be incapable of service shall be returned to their country, and the remainder on condition that they will not take up arms while the war lasts. Evacuations, and the persons directing them, shall be covered by an absolute neutrality. A distinctive and uniform flag shall be adopted for hospitals, ambulances, and evacuations, to be accompanied in all cases by the national standard. An armlet will also be admissible to protect the neutrality of persons, but the bestowal of it shall be left to the military authorities. The flag and armlet will bear a red cross on a white field. The details of the execution of this agreement shall be left to the commanders of the belligerents, subject to the instructions of their respective governments. Other powers are invited to join those who have already contracted. Great Britain, Sweden and Norway, Greece, and the Duchy of Mecklenburg-Schwerin, have already signified officially their adhesion. Portugal, Hesse, and Wirtemberg only await certain necessary formalities before following suit. No doubt our own country will make haste to do the same. The Government acted constantly throughout the war in the spirit of this beneficent agreement.—*The Nation.*

Absinthe.

This liquor, on the pernicious qualities of which so much has been said, has at length found an advocate in Dr. Deschamps, of Avallon, who, in a paper addressed to the Paris Academy of Sciences, scientifically examines the numerous charges brought against it. Dr. Deschamps has analyzed several absinthes, that of Switzerland, that of Lyons, that of Avallon, and six different kinds bought at various wine shops, and it appears from his researches that this compound does not contain any really dangerous ingredients. He says:

"Absinthe is an alcoholate, colored with the juice of spinach, nettles, etc., but the plant called *absinth*, or wormwood, is never used for this purpose. Indigo and turmeric, which have sometimes been employed to color it, are utterly innocuous. The traces of copper sometimes found in it can only be attributed to the action of the liquid on the brass stop-cocks fixed to the barrels, or else to the vessels used by some dealers and manufacturers, but not to the introduction of sulphate of copper into the liquid. There is no absinthe or copper in it, nor could it have any injurious effect on the constitution. The action which this liquor exercises on ordinary drinkers can only be attributed to the alcohol it contains, and under equal circumstances it does not cause more intoxication than other alcoholic drinks. The heat which the absinthe-drinker feels on the mucous membrane of the stomach is due to the instantaneous action of the alcohol which the liquor contains; and if the individual is not immediately intoxicated, it is because the absorption is retarded by that very action.

"A glass of absinthe taken casually can exercise no pernicious influence on the mental state of the drinker. The real danger it offers lies in its sugary taste, which is due to the essence of aniseed and illicium which it contains, and does not leave behind it that disagreeable pastry sensation peculiar to liquids containing sugar. It has also the property of provoking agreeable eructations, which induce the drinker to return to the wine-shop keeper. He who has the power to resist the temptation, and only to take one glass of absinthe per day, is not more exposed to danger than if he were to drink other alcoholic

liquors. The fatal effects noticed in the case of the lovers of this drink cannot in any way be attributed to *absinth* (wormwood), since absinthe does not contain any; and it is very easy to account for the brutalizing effects of the latter when it is considered that he who drinks twenty or thirty glasses of it places himself under the influence of six hundred or nine hundred cubic centimetres of alcohol of from sixty-five to sixty-nine centesimal degrees."

A New Poison.

A new poison has been examined and reported on by M. Pelikan, of St. Petersburg. The plant which produces it comes from the Gaboon, and is used by the natives of that locality for poisoning arrows. It belongs to the natural order *Apocynaceæ*, and produces its injurious action almost exclusively upon the heart. M. Pelikan's experiments were made upon the common frog, and they have led him to the following conclusions:

"1. The poison produces at first an increased action of the heart. 2. After a while the pulse decreases in frequency, and the heart soon entirely ceases to beat. 3. The cessation of action is not regularly progressive. 4. When the ordinary action of the heart has been completely arrested, the ventricle still exhibits peculiar movements, which appear to be peristaltic. 5. When the ventricle has completely ceased to act, and is strongly contracted, and empty, the auricles, though full of blood, continue to contract. 6. Finally, the paralysis of the heart has nothing in common with cadaveric rigidity. When once paralyzed, this organ does not respond to any stimuli, whether mechanical, chemical, or electrical, applied either directly or to the nerves."

MARRIED.

Berry—Whitman.—At Gardiner, Me., Aug. 16, at the residence of the bride's father, Dr. Caleb S. Whitman, formerly of Boston, by Rev. Frederic Gardiner, Mr. Frederic A. Berry and Miss Sarah C. Whitman.

DIED.

Anderson.—In this city on the 25th ult., Dr. Isaac Anderson, in the 70th year of his age.

Bliss.—At New Rochelle, N. Y., on Wednesday Aug. 23, 1865, at the residence of C. H. Hurd, Doctor Ela D Bliss, aged 26 years, late Surgeon in the United States Army.

Condict.—At Dover, Morris co., N. J., on Sunday, Aug. 20, suddenly, of cholera infantum, Francis Seward, infant son of Dr. I. W. Condict and Mary T. Condict.

Fine—Drowned, on Monday, August 21st, Miss Ann Elizadeth Fine, aged 23 years, daughter of Dr. J. M. Fine, of this city.

Horwitz.—On Monday, 21st ult., John M. Read, son of Dr. P. J. and C. N. Horwitz, aged 6 months and 25 days.

Stephenson.—On Monday, Aug. 28, at his late residence in South Brooklyn, Mark Stephenson, M. D.

Tuthill.—On Sunday, Aug. 27, at No. 52 Hoyt st., Brooklyn, Dr. Frank Tuthill, of San Francisco, Cal., late of New York.

Worthington.—On Second-day, the 21st ult., Mary M., infant daughter of Dr. J. H. Worthington, of this city.

ANSWERS TO CORRESPONDENTS.

Dr. J. W. McC., Minerva, Ohio.—Bumstead on Venereal, sent by mail, August 21st.

Dr. W. W. S., St. Mary's, Pa.—Uterine Supporter, sent by Express, August 22d.

Dr. J. H. K., Worcester, Pa.—Tanner Infancy and Childhood, sent by mail, August 23d.

Dr. G. C. E., Uniontown, Pa.—Elastic stocking sent by mail, August 24th.

Dr. J. L. K., Mertztown, Pa.—Tanner's Practice, two Pereira's Pocket Prescription Books, sent by Express, August 24th.

Dr. J. W. M., Shippensville, Pa.—Wythe's Pocket Dose Book, Beasley's Prescriptions and Remedies, and Fuller on Rheumatism and Gout, sent by mail Aug. 28th.

Dr. J. W. G., Bellair, Ohio.—Lallemand on Spermatorrhœa, sent by mail, August 28th.

Dr. H. L. C., Groveport, Ohio.—History of American Medical Association, sent by mail, Aug. 26th.

METEOROLOGY.

August	21,	22,	23,	24,	25,	26,	27.
Wind	S. W.	E.	N. W.	N.	N. W.	S. W.	N. W.
Weather	Clear.	Cl'dy, Rain.	Clear.	Clear.	Clear.	Clear.	Clear.
Depth Rain		8-10					
Thermometer.							
Minimum	67°	67°	50°	48°	50°	55°	60°
At 8 A. M.	80	70	62	60	69	71	71
At 12 M.	83	74	68	62	71	75	77
At 3 P. M.	88	75	69	65	72	76	79
Mean	79 50	71.50	62.25	58.75	65.50	69.25	71.75
Barometer.							
At 12 M.	29.9	29.8	30.	30 3	30 3	30.2	30.1

Germantown, Pa. B. J. Leedom.

AMERICAN MEDICAL ASSOCIATION.

Members desiring copies of the Transactions for 1865, must forward their subscriptions ($3) immediately, as the number of copies published will be but slightly in excess of the number of subscriptions.

Wm. B. Atkinson,
Permanent Secretary,
215 Spruce street, Philadelphia.

Aug. 12, 1865.

WANTED.

Subscribers having any of the following numbers to spare, will confer a favor, and likewise be credited on their running subscriptions, with such as they may return us.

Vols. I, II, III & IV. All the numbers.
Vol. V. No. 1, Oct. 6, '60; No. 19, Feb. 9, '61.
" VI. Nos. 18, 19, Aug. 3, 10, '61.
" VII. Nos. 1, 2, 6, Oct. 5, 12, Nov. 9, '61; Nos. 10 to 12, Dec. 7, '61, to March 8, '62.
" VIII. Nos. 17, 18, 19, 22, 23, July 26, Aug. 2, 9, 30, Sept. 6, '62.
" IX. Nos. 6, 7, 8, 13 & 14, 17 & 18, Nov. 8, 15, 22, '62; Dec. 27, '62, and Jan. 3, '63, Jan. 24 & 31, '63.
" XI. Nos. 1, 4, 5, 7, 11, 21, Jan. 2, 23, 30, Feb. 13, March 12, May 21, '64.
" XII. Nos. 1, 5, 11, 12, 17, July 2, Sept. 10, Oct 22, 29, '64, Feb. 4, '65.

☞ *We are in pressing need just now of a few copies for new subscribers, of No. 414, Feb. 4, 1865.*